

project works to withstand the loading or overtopping which may occur from a flood up to the probable maximum flood or the capacity of spillways to prevent the reservoir from rising to an elevation that would endanger the project works.

(2) If structural failure would not present a hazard to human life or cause significant property damage, spillway adequacy may be evaluated by means of a design flood of lesser magnitude than the probable maximum flood, if the report of the independent consultant pursuant to §12.37 provides a detailed explanation of the bases for the finding that structural failure would not present a hazard to human life or cause significant property damage.

§ 12.36 Emergency corrective measures.

If, in the course of an inspection, an independent consultant discovers any condition for which emergency corrective measures are advisable, the independent consultant must immediately notify the licensee and the licensee must report that condition to the Regional Engineer pursuant to §12.10(a) of this part.

§ 12.37 Report of the independent consultant.

(a) *General requirement.* Following inspection of a project development as required under this subpart, the independent consultant must prepare a report and the licensee must file three copies of that report with the Regional Engineer. The report must conform to the provisions of this section and be satisfactory to the authorized Commission representative.

(b) *General information in the initial report.* (1) The initial report filed under this subpart for any project development must contain:

- (i) A description of the project development;
- (ii) A map of the region indicating the location of the project development;
- (iii) Plans, elevations, and sections of the principal project works;
- (iv) A summary of the design assumptions, design analyses, spillway design flood, and the factors of safety used to

evaluate the structural adequacy and stability of the project works; and

(v) A summary of the geological conditions that may affect the safety of the project works.

(2) To the extent that the information and analyses required in paragraph (b)(1) of this section, are contained in a report of an independent consultant prepared and filed in compliance with Commission regulations in effect before March 1, 1981 the information and analyses may be incorporated by specific reference into the first report prepared and filed under this subpart.

(c) *Information required for all reports.* Any report of an independent consultant filed under this subpart must contain the information specified in this paragraph.

(1) *Monitoring information.* The report must contain monitoring information that includes time-versus-reading graphs depicting data compiled from any existing critical or representative monitoring instruments that measure the behavior, movement, deflection, or loading of project works or from which the stability, performance, or functioning of the structures may be determined.

(i) Any monitoring data plotted on graphs must be presented in a manner that will facilitate identification and analysis of trends. The data may be summarized to facilitate graphical representation.

(ii) Plan and sectional drawings of project structures sufficient to show the location of all critical or representative existing monitoring instruments must be included. If these drawings have been included in a previous report prepared and filed by an independent consultant, they may be incorporated by specific reference to that earlier report.

(2) *Analyses.* The report must:

- (i) Analyze the safety of the project works and the maintenance and methods of operation of the development fully in light of the independent consultant's reviews, field inspections, assessments, and evaluations described in §12.35;